

AMENDMENTS TO THE CLAIMS UNDER 37 C.F.R. § 1.121(c)(1)

Please cancel claims 1-17, 33-61, 65-77, 79, and 84-89 without prejudice.

Please amend claims 18, 21, 23-28, 30-32, 62-63, 78, and 80-83 as follows:

18. (CURRENTLY AMENDED) A method of enhancing cognitive function in a warm-blooded vertebrate patient in need of said treatment, said method comprising the step of administering to said warm-blooded vertebrate patient an effective amount of a compound capable of inhibiting the peptidase activity of one or more neurogenic peptidases in the brain of said patient.

19. (ORIGINAL) The method of claim 18 wherein the warm-blooded vertebrate is a human patient suffering from dementia or amnesia.

20. (ORIGINAL) The method of claim 18 wherein the warm-blooded vertebrate is a human patient suffering from Alzheimer's Disease.

21. (CURRENTLY AMENDED) The method of claim 18 wherein the ~~peptidase inhibitor~~ compound is a β -lactam compound.

22. (ORIGINAL) The method of claim 21 wherein the β -lactam compound is a β -lactamase inhibitor.

23. (CURRENTLY AMENDED) The method of claim 21 wherein the β -lactam compound ~~peptidase inhibitor~~ is selected from the group consisting of penicillins, cephalosporins, penems, 1-oxa-1-dethia cepheems, clavams, clavems, azetidinones, carbapenams, ~~carbapenams~~ carbapenems, carbacephems, and analogs thereof.

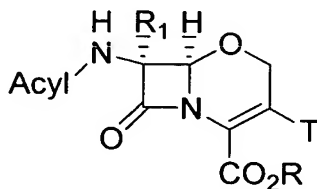
24. (CURRENTLY AMENDED) The method of claim 23 wherein the β -lactam compound ~~peptidase inhibitor~~ is a 1-oxa-1-dethia-analogue of a cephalosporin.

25. (CURRENTLY AMENDED) The method of claim 18 ~~wherein inhibitor~~ further comprising the step of administering an effective amount of a P-glycoprotein efflux pump inhibitor.

26. (CURRENTLY AMENDED) The method of claim 23 wherein the β -lactam compound ~~peptidase inhibitor~~ is administered in combination with an effective amount of a P-glycoprotein efflux pump inhibitor.

27. (CURRENTLY AMENDED) The method of claim 18 wherein the ~~peptidase inhibitor~~ compound is a β -lactam antibiotic and the amount administered to the warm-blooded vertebrate patient is at least 50 $\mu\text{g/kg}$ but less than an amount effective to provide antibiotically-clinically effective antibacterial blood levels of the ~~inhibitor~~ compound.

28. (CURRENTLY AMENDED) The method of claim 18 wherein the ~~peptidase inhibitor~~compound is a compound of the ~~formula~~formula:



wherein R is hydrogen, a salt forming group or an active ester forming group; R¹ is hydrogen or C₁-C₄ alkoxy; T is C₁-C₄ alkyl, halo, hydroxy, O(C₁-C₄)alkyl, or -CH₂B, wherein B is the residue of a nucleophile B:H, and ~~acyl~~Acyl is the residue of an organic acid Acyl-OH ~~AcylOH~~.

29. (ORIGINAL) The method of claim 28 wherein the compound is moxalactam or flomoxef.

30. (CURRENTLY AMENDED) The method of claim 29 ~~wherein~~ ~~inhibitor~~ further comprising the step of administering an effective amount of a P-glycoprotein efflux pump inhibitor.

31. (CURRENTLY AMENDED) The method of claim 18 wherein the ~~peptidase inhibitor~~compound is a 2-optionally substituted oxa-2-deamino analogue of glutamic acid, a 2-optionally substituted carba-2-deamino analogue of glutamic acid, or an N-substituted derivative of glutamic acid.

32. (CURRENTLY AMENDED) The method of claim 34 ~~wherein~~ ~~inhibitor~~31 further comprising the step of administering an effective amount of a P-glycoprotein efflux pump inhibitor.

62. (CURRENTLY AMENDED) A method of treating cognitive disorders in a warm-blooded vertebrate ~~human patient~~ in need of said treatment, said method comprising the step of inhibiting neurogenic peptidase activity in the brain of said vertebrate, said neurogenic peptidase characterized by its inhibition with effective amounts of the peptide Ala-D-γ-Glu-Lys-D-Ala-D-Ala.

63. (CURRENTLY AMENDED) The method of claim 62 wherein the step of inhibiting the neurogenic peptidase is carried out by administering an amount of a β-lactam antibiotic effective to enhance the warm-blooded vertebrate's ~~patient's~~ cognitive performance.

64. (ORIGINAL) The method of claim 63 wherein the β-lactam antibiotic is administered in an amount less than that necessary to obtain antibiotically effective blood levels of said antibiotic.

78. (CURRENTLY AMENDED) ~~The use,~~ A use in the manufacture of a medicament, of an inhibitor of the peptidase activity of a N-acetylated- α -linked-acidic dipeptidase as the active ingredient in a cognition enhancing composition in admixture with a pharmaceutically acceptable carrier.

80. (CURRENTLY AMENDED) The use of ~~any of claims 78 or 79~~ claim 78 in the manufacture of a medicament wherein the inhibitor is a β -lactam antibiotic or a β -lactamase inhibitor.

81. (CURRENTLY AMENDED) The use of claim 80 in the manufacture of a medicament wherein the ~~medicament~~ use further includes a P-glycoprotein efflux pump inhibitor.

82. (CURRENTLY AMENDED) The use of claim 78 in the manufacture of a medicament wherein the inhibitor is a 2-optionally substituted oxa-2-deamino analogue of glutamic acid, a 2-optionally substituted carba-2-deamino analogue of glutamic acid, or an N-substituted derivative of glutamic acid.

83. (CURRENTLY AMENDED) The use of claim 82 in the manufacture of a medicament wherein the ~~medicament~~ use further includes a P-glycoprotein efflux pump inhibitor.

Please add new claims 90-91 as follows:

90. (NEW) The use of claim 80 in the manufacture of a medicament wherein the inhibitor is a 2-optionally substituted oxa-2-deamino analogue of glutamic acid, a 2-optionally substituted carba-2-deamino analogue of glutamic acid, or an N-substituted derivative of glutamic acid.

91. (NEW) The use of claim 90 in the manufacture of a medicament wherein the use further includes a P-glycoprotein efflux pump inhibitor.